

PROJECT DESCRIPTION

I. GENERAL:

THIS PROJECT INVOLVES THE UP-GRADE OF AN INTERSECTION CONTROL BEACON (ICB) TO A TRAFFIC CONTROL SIGNAL AT THE INTERSECTION OF US 219 AND MOSSER ROAD/DEEP CREEK DRIVE, IN GARRETT COUNTY, MARYLAND. AN ADVANCE SIGNAL AHEAD HAZARD INDENTIFICATION BEACON (HIB) SHALL BE INSTALLED NORTH OF THE INTERSECTION.

US 219 (GARRETT HWY) IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION.

II. INTERSECTION OPERATION:

THE INTERSECTION SHALL OPERATE IN A FOUR-PHASE, SEMI-ACTUATED MODE, WITH US 219 APPROACHES OPERATING CONCURRENTLY. ALSO THE SIDE ROADS SHALL OPERATE CONCURRENTLY. THE HIB IS HARD WIRED TO THE THE INTERSECTION AND SHALL FLASH YELLOW WHEN US 219/ MAIN LINE HAS A STOP CONDITION. A SPECIAL RELAY PACKAGE SHALL BE INSTALL IN THE EXISTING BASE MOUNTED CABINET AT THE INTERSECTION AND IN THE PROPOSED "G" TYPE POLE MOUNTED CABINET WITH TWO-CURCUIT FLASHER AT THE HIB.

III. SPECIAL NOTES:

THE INTERNAL WIRING TO THE EXISTING CONTROLLER SHALL BE COMPLETED BY THE SIGNAL SHOP. THE CONTRACTOR SHALL NOTIFY ED RODNEHIZER AT 410-787-7652, SEVENTY-TWO HOURS PRIOR TO THE CABINET MODIFICATION.

CONTACT LIST

Mr. George Small, Asst.  
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301-729-8444

Mr. John True, Asst.  
District Engineer Construction  
Phone: (301) 729 - 8486

Mr. Larry Humberston,  
District Utility Engineer  
Phone: (301) 729 - 8439

Mr. Edward Rodenhizer, Chief  
SHA Traffic Signal Shop  
Phone: (410) 787 - 7650

Mr. Richard Daff Sr., Chief  
Traffic Operations Division  
Phone: (410) 787 - 7630

EQUIPMENT LISTS

A. EQUIPMENT TO BE FURNISHED BY SHA AND INSTALL BY THE CONTRACTOR.

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
9010	128 SF		SHEET ALUMINUM SIGNS:
	1 EA		"RIGHT SYMBOL, ONLY" R3-5R, 30"X 36", OVERHEAD MOUNTING HARDWARE
	1 EA		"SIGNAL AHEAD, PREPARE TO STOP, WHEN FLASHING" W3-3(2) 120" X 60", OVERHEAD MOUNTING HARDWARE.
	2 EA		"NEW, SYMBOL SIGNAL" WITH FLAGS W3-3 NEW 36" X 36", GROUND MOUNTING HARDWARE.
	2 EA		"NEW, SYMBOL SIGNAL" WITH FLAGS W3-3 NEW 48" X 48", 1- OVERHEAD AND 1- GROUND MOUNTING HARDWARE.
	1 EA		27' POLE WITH 60' MAST ARM 4- 2" X 90" ANCHOR BOLTS.
	1 EA		20' LIGHTING ARM CLAMP- ON.
	1 EA		"G" TYPE CABINET WITH TWO-CURCUIT FLASHER.
	2 EA		SPECIAL RELAY PACKAGE.

EQUIPMENT LISTS cont.

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

ITEM NO.	QUANTITY	UNIT	DESCRIPTION
1001	1 EA		MAINTENANCE OF TRAFFIC.
2002	1 CY		TEST PIT EXCAVATION.
5001	85 LF		REMOVAL OF EXISTING PERMANENT PAVEMENT LINE MARKINGS -ANY WIDTH.
5003	125 LF		5" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS.
5004	350 LF		5" HEAT APPLIED YELLOW PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS.
5006	90 LF		24" HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS.
8001	5 CY		CONCRETE FOUNDATION.
8008	1 EA		INSTALL STEEL POLE AND MAST ARM.
8014	1 EA		REMOVE & DISPOSE MATERIAL AND EQUIPMENT PER ASSIGNMENT.
8021	54 LF		WOOD POST 4" X 6" DRILLED.
8022	1800 LF		NO. 6 AWG STRANDED BARE COPPER GROUND WIRE.
8024	25 LF		1" ELECTRICAL CONDUIT -GALVANIZED SLEEVE.
8026	1 EA		3" WEATHERHEAD.
8031	1365 LF		3" SCHEDULE 80 RIGID PVC CONDUIT -TRENCHED.
8032	55 LF		4" SCHEDULE 80 RIDIG PVC CONDUIT - TRENCHED.
8034	120 LF		3" SCHEDULE 80 RIDIG PCV CONDUIT - SLOTTED.
8035	170 LF		4" SCHEDULE 80 RIDIG PVC CONDUIT - SLOTTED.
8036	15 LF		1" LIQUID TIGHT FLEXIBLE NON-METALLIC CONDUIT FOR DETECTOR SLEEVES.
8038	1 EA		ELECTICAL UTILITY SERVICE EQUIPMENT 120/240, VOLTS 60 AMPS.
8040	40 LF		ELECTRICAL CABLE 1- CONDUCTOR NO. 8 AWG THHN/THWN.
8043	2 EA		NON-INVASIVE DETECTOR 500' LEAD IN CABLE.
8045	15 EA		ELECTRICAL HANDHOLE.
8047	50 SF		INSTALL GROUND MOUNTED SIGN.
8048	78 SF		INSTALL OVERHEAD SIGN.
8064	1 EA		250 WATT HPS LAMP AND LUMINAIRE.
8069	2 EA		GROUND ROD -3/4" DIA. X 10' LENGTH.
8070	3 EA		8" VEHICULAR TRAFFIC SIGNAL HEAD SECTION.
8071	24 EA		12" VEHICULAR TRAFFIC SIGNAL HEAD SECTION.
8074	1 EA		CLEAN, GALVANIZE AND CAP TRAFFIC STRUCTURE. (60' MAST ARM'S BUTT END 40')
8076	320 LF		ELECTRICAL CABLE - 2 CONDUCTOR ALUMINUM SHIELDED.
8079	100 LF		ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 AWG).
8080	670 LF		ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 AWG).
8081	340 LF		ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 AWG)TC.
8082	970 LF		LOOP WIRE ENCASED IN FLEXIBLE TUBING (NO. 14 AWG).
8083	245 LF		SAW CUT FOR SIGNAL (LOOP DETECTOR).
8089	1 EA		INSTALL CONTROLLER AND CABINET - POLE MOUNTED.
NEG	1430 LF		ELECTRICAL CABLE - 7 CONDUCTOR (NO. 12 AWG).
NEG	2 EA		12" (LED) VEHICULAR TRAFFIC SIGNAL HEAD SECTION.

\*ALL EXISTING EQUIPMENT TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR.

PHASING CHART

1	2	3	4	5	6	7	8	9	10	11
(R)	(R)	(Y)	(Y)	(R)	(R)	(R)	(R)	(R)	(R)	(R)
(Y)	(Y)			(Y)	(Y)	(Y)	(Y)	(Y)	(Y)	(Y)
(G)	(G)			(G)	(G)	(G)	(G)	(G)	(G)	(G)

Phase 2 & 6	G	G	DARK	DARK	G	G	R	R	R	R	R
2 & 6 Change	Y	Y	FL/Y	FL/Y	Y	Y	R	R	R	R	R
Phase 4 & 8	R	R	FL/Y	FL/Y	R	R	G	G	G	G	G
4 & 8 Change	R	R	DARK	DARK	R	R	Y	Y	Y	Y	Y
Flashing Operation	FL/Y	FL/Y	DARK	DARK	FL/Y	FL/Y	FL/R	FL/R	FL/R	FL/R	FL/R

WIRING DIAGRAM

**WIRING KEY**

A } 2-CONDUCTOR ELECTRICAL CABLE  
B } (NO. 14 A.W.G) ALUMINUM SHIELDED

C } EXISTING 5-CONDUCTOR ELECTRICAL  
D } CABLE (NO. 14 A.W.G)

F } 5-CONDUCTOR ELECTRICAL  
G } CABLE (NO. 14 A.W.G)

J } EXISTING 7-CONDUCTOR ELECTRICAL  
K } CABLE (NO. 14 A.W.G)

L } 7-CONDUCTOR ELECTRICAL  
M } CABLE (NO. 14 A.W.G)

N - 7-CONDUCTOR ELECTRICAL  
CABLE (NO. 12 A.W.G)

O - EXISTING STRANDED BARE COPPER  
GROUND WIRE (NO. 6 A.W.G)

P - STRANDED BARE COPPER  
GROUND WIRE (NO. 6 A.W.G)

Q - 3 WIRES/ 1-CONDUCTOR (NO. 4  
A.W.G) THHN/THWN FOR FEED

R - EXISTING 2-CONDUCTOR ELECTRICAL  
TRAY CABLE (NO. 12 A.W.G)

S } 2-CONDUCTOR TRAY CABLE  
T } (NO 12 A.W.G)

U } NON-INVASIVE DETECTOR  
V } WITH 500' LEAD

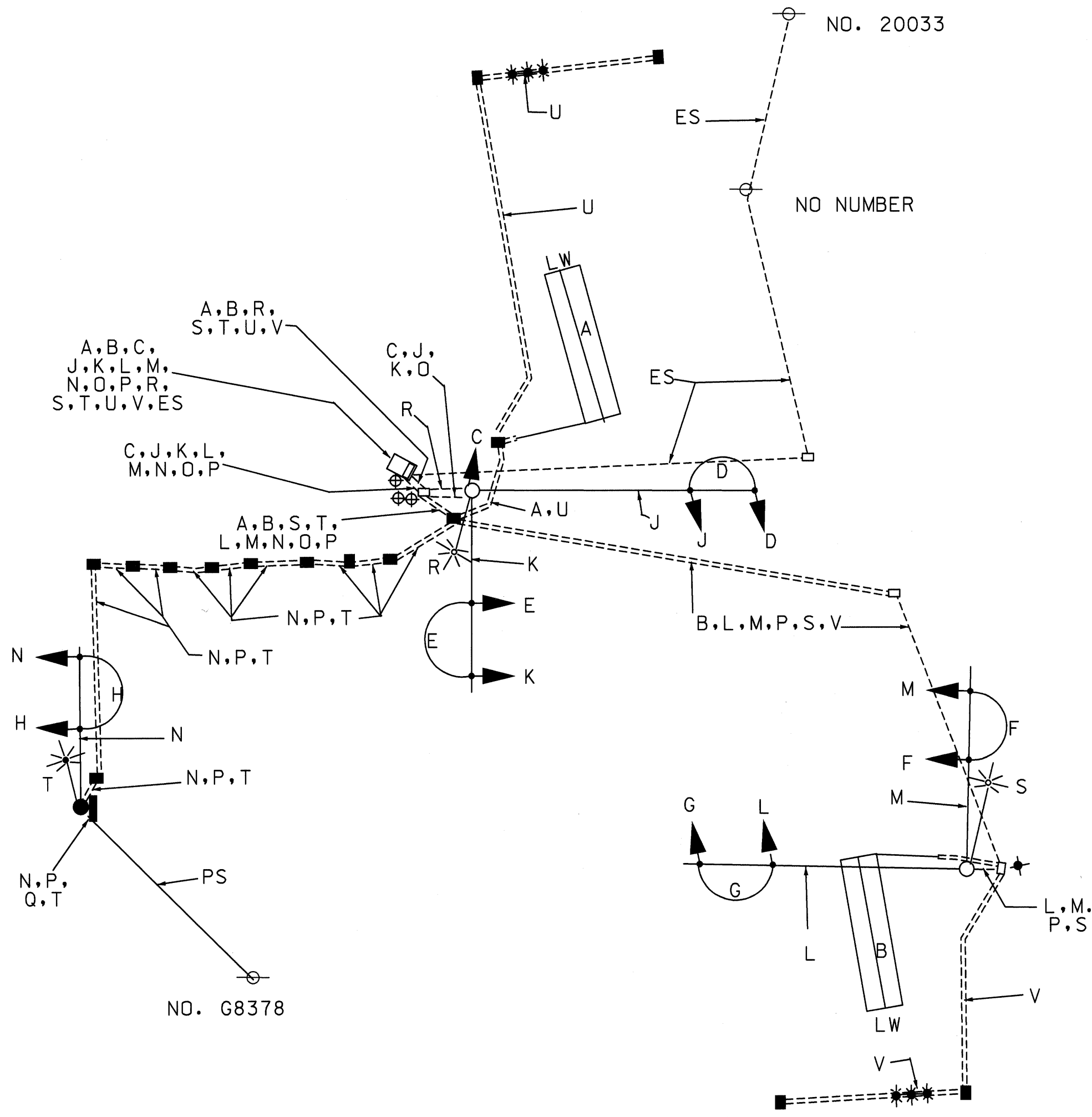
⊕ EXISTING GROUND ROD

✖ PROPOSED GROUND ROD

LW - LOOPWIRE (NO. 14 A.W.G.)

ES - EXISTING POWER SERVICE

PS - PROPOSED POWER SERVICE



BAI BRUDIS & ASSOCIATES, INC.  
CONSULTING ENGINEERS

9220 RUMSEY ROAD, SUITE 110  
COLUMBIA, MARYLAND 21045  
(410)-884-3607

**MARYLAND DOT - STATE HIGHWAY ADMINISTRATION**  
*Office of Traffic & Safety*  
**TRAFFIC ENGINEERING DESIGN DIVISION**  
GENERAL INFORMATION SHEET

US 219 (GARRETT RD.) AND  
MOSSER RD./DEEP CREEK DR.

DRAWN BY: E. M. MILES	F.A.P. NO. 4095A	TS NO. 4095A	SHEET NO. 2 OF 2
CHECKED BY: R. J. MILSTEAD	S.H.A. NO. GARRETT	T.I.M.S. NO. F431	
SCALE: NONE	COUNTY: GARRETT	LOG MILE: 11021924.34	
DATE: 3/7/03			